

Generalized Linear Models (log link, Gamma family) adjusting for gender, age, BMI, type of intervention, complications and comorbidities. Costs are expressed in Euro 2013. **RESULTS:** 280 patients (171 workers, 61%, and 109 no-workers including people out of work, students, housewives and retirees, 39%) have been submitted to bariatric surgery and followed up to 1 year after the intervention. The overall social cost, including costs of intervention and 1-year follow up, was €11,310 (\pm €3,778). Direct medical costs amounted to €8,737 (\pm 2,527), representing the 77% of the overall cost, while direct non medical costs and indirect costs accounted for 13% and 10% (€1.497 \pm €1,928 and €1,076 \pm €1,675). No working conditions had an incremental effect on direct non-medical costs of €676 (95% CI: €212–€1,140, $p=0.004$). Working conditions increased indirect costs by €1,384 (95% CI: €1,002–€1,766, $p=0.000$). **CONCLUSIONS:** Socio-economic determinant such as employment status of patient led to significant impacts on direct non medical costs and indirect costs of a patient submitted to bariatric surgery.

PSY37

THE INDIRECT COSTS OF INFLAMMATORY BOWEL DISEASE (CROHN'S DISEASE AND ULCERATIVE COLITIS) ASSOCIATED WITH ABSENTEEISM IN POLAND IN 2013

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OBJECTIVES: The aim of this study was to assess the indirect costs caused by absenteeism associated with inflammatory bowel disease (IBD) - (Crohn's disease - CD; and ulcerative colitis - UC) from the perspective of the Social Insurance Institution (ZUS) in Poland. **METHODS:** The estimates were based on data provided by ZUS referring to year 2013 and concerning absence from work due to the illness (sick leave), the amount of short-term disability, the sufferers of which claim rehabilitation benefit, and the amount of permanent (or long-term) disability, the sufferers of which claim disability pension. Costs were calculated with Human Capital Approach methodology taking into account Gross Domestic Product (GDP) per capita equalled €10 278. **RESULTS:** Total indirect costs of CD, UC in the year 2013 calculated using GDP per capita in Poland were €7 817 156 and €8 990 313, respectively. Total indirect costs of IBD in the year 2012 and 2013 in Poland were €14 220 181 and €16 807 469, respectively (an increase of nearly 15% because of substantial growth short-term disabilities). The highest component of indirect costs of IBD was sick leave (51%). Long and short-term disability costs constitute 39% (limited period - 19% and unlimited period 20%) and 10% of total indirect costs of IBD, respectively. One sick leave of person with IBD generated the cost of lost productivity equal €779 calculated using GDP per capita. Indirect cost of short-term disability for one entitlement to the benefit of rehabilitation were €7 314. Cost of one long-term benefit were much higher than short-term benefit and equalled for limited period €36 714 and unlimited period €941. Total long-term disability costs amounted €676 651. **CONCLUSIONS:** IBD in Poland generated high indirect costs. The main component was sick leave; rehabilitation benefit and disability pension generated lower costs of lost productivity.

PSY38

IDIOPATHIC PULMONARY FIBROSIS: HOSPITAL DISEASE MANAGEMENT AND ASSOCIATED COSTS

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OBJECTIVES: Idiopathic pulmonary fibrosis (IPF) is a chronic, fibro-proliferative and fatal lung disease. A study was conducted to describe the causes and main comorbidities of hospitalized patients and associated costs in France. **METHODS:** A retrospective, observational study was set up using the French hospital discharge database (PMSI). Patients with a first hospitalization for IPF (ICD-10 code: J841) in 2008 were identified and followed during a 5-year period. As J841 code includes other fibrotic pulmonary diseases, an algorithm for data extraction was defined, with exclusion of age <50 and presence of a differential diagnosis in the following year (connective disease or pneumoconiosis). Patient characteristics, first stay and occurrence of events of special interest were described as well as associated costs. **RESULTS:** In 2008, 6,476 patients newly hospitalized for IPF were identified, with a mean age of 75.4 \pm 10.3 years, and 56% were men. The mean total cost of hospitalizations per patient for the 5-year follow-up period was €15,532 \pm 15,973. Main cost drivers were the serious events related to the disease, specifically acute exacerbation (37% of patients, with a 10% in-hospital mortality rate and a cost of €4,091 \pm 4,429/event), cardiac events (48% of patients with a 14% in-hospital mortality rate and a cost of €5,731 \pm 5,463/event), acute respiratory infections (44% of patients with a 18% in-hospital mortality rate and a cost of €7,471 \pm 7,981/event) and arterial thrombosis (12% of patients with a 20% in-hospital mortality rate and a cost of €7,467 \pm 7,216/event). Finally, 11% of patients received palliative care with a mean cost for the last year of life of €14,807 \pm 11,979 per deceased patient. **CONCLUSIONS:** This study is the first providing extensive data on hospital management for patients with IPF in France, demonstrating high burden and hospital cost, especially for acute respiratory deteriorations. These results could be used in economic evaluations for IPF patients in France.

PSY39

DIRECT MEDICAL COSTS ASSOCIATED WITH ANKYLOSING SPONDYLITIS IN CHINESE PATIENTS: ESTIMATIONS FROM CHINA PUBLIC HEALTH INSURANCE CLAIM DATA

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OBJECTIVES: To estimate direct medical costs associated with ankylosing spondylitis (AS) in publicly insured Chinese patients. **METHODS:** China Health Insurance Research Association (CHIRA) claim data containing patients randomly selected from publicly insured urban residents and workers across China was used as the

data source to identify patients with AS and their insurance claim records in 2013 for in-patient care and out-patient care. The identified patients were stratified by AS-related medications for the comparisons on drug costs and non-drug medical costs. Generalized linear model (GLM) was conducted to assess the impact of the classified medications on on-drug medical costs after full adjustment of patient baseline characteristics including demography, AS-related to complications, and comorbidities. **RESULTS:** Among the identified 1299 patients with diagnosed AS, the AS-related medications included nonsteroidal anti-inflammatory drugs (NSAIDs) (n=234), immunosuppressant (n=146), combination of NSAID and immunosuppressant (n=626), biologics (n=60), and Chinese medications (n=233). The total medical costs associated with AE-related treatments ranged from RMB 4,565 for Chinese medication to RMB 24,585 for biologics treatment (1 RMB = 0.16 US\$). However, biologics treatment and the combination treatment of NSAID and immunosuppressant had similar non-drug medical costs (RMB 7,039 versus RMB 7,450, $p=0.164$). GLM regression analysis further confirmed highly comparable non-drug medical costs associated with biologics (coefficient: 0.0639, $p=0.741$) relative to the combination treatment of NSAID and immunosuppressant. **CONCLUSIONS:** Among publically insured Chinese patients with AS, biologics treatments were associated with highly comparable non-drug medical costs as the combination treatment of NSAID and immunosuppressant. This finding suggests that biologics may effectively control health resource utilization through their superior treatment effects.

PSY40

COSTS OF ABSENTEEISM IN PSORIATIC AND ENTEROPATHIC ARTHROPATHIES BASED ON REAL-LIFE DATA FROM POLAND'S SOCIAL INSURANCE INSTITUTION DATABASE IN 2013

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OBJECTIVES: The aim of this study was to assess the indirect costs caused by absenteeism associated with psoriatic and enteropathic arthropathies from the perspective of the Social Insurance Institution (ZUS) in Poland. **METHODS:** The estimates were based on data from the year 2013 concerning sick leave and the amount of short-term disability, the sufferers of which claim rehabilitation benefit, and the amount of long-term disability (permanent or fixed time), the sufferers of which claim disability pension. Costs calculated taking into account Gross Domestic Product (GDP) per capita equalled €10 278, Gross Value Added (GVA) per worker equalled €24 680 and Gross Income (GI) per worker equalled €7 339 were presented in 2013 prices. **RESULTS:** Total indirect costs of psoriatic and enteropathic arthropathies in the year 2013 calculated using GDP per capita, GVA and GI per worker in Poland were €7 341 217, €17 628 441 and €5 242 346, respectively. The highest component of indirect costs was permanent long-term disability (43%). Fixed period long-term disability and short-term disability costs constitute 20% and 9% of total indirect costs, respectively. In 2013 Poland's Social Insurance Institution database reported 2 100 patients that had 4 922 sick leave episodes, 180 short-term disability episodes and 80 long-term disability episodes. Indirect costs per patient associated with sick leave were €1 030, €2 474 and €736 calculated using GDP, GVA and GI, respectively. Indirect costs per patient associated with short-term disability were €298, €715 and €212 respectively and associated with long-term disability were as high as €2 168, €5 206 and €1 548, respectively. **CONCLUSIONS:** Psoriatic and enteropathic arthropathies in Poland generated high indirect costs. The main component was permanent long-term disability; short-term disability generated lower costs of lost productivity. The highest cost per patient was generated by permanent long-term disability.

PSY41

DIRECT COST OF MYELODYSPLASTIC SYNDROMES ASSOCIATED WITH A DELETION 5Q CYTOGENETIC ABNORMALITY (DEL5Q MDS) IN PATIENTS WHO ARE RED BLOOD CELL TRANSFUSION DEPENDENT IN MEXICO

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OBJECTIVES: To estimate the direct cost of Del5q MDS from the perspective of the public healthcare system in Mexico. **METHODS:** We evaluated the amount of resources utilized by patients with Del5q MDS from an expert panel of eight hematologist through the Delphi technique. Consensus was reached after two expert panel rounds and patterns of use were analyzed statistically. Unit costs of resources were extracted from institutional catalogues and annual cost estimations were performed for different health states. All values were expressed in US dollars of 2015. **RESULTS:** From the consensus of panel experts we found that management of patients with Del5q MDS at Mexican public healthcare institutions consisted of best supportive care with red blood cell (RBC) transfusions and erythropoiesis-stimulating agents, and since these patients are RBC-transfusion dependent, they receive 33 units of RBC per year resulting in a cost of US\$5,265.60. Iron overload is the main complication of transfusion dependency resulting in an annual cost of US\$1,782.11 attributable to congestive heart failure. Other resources used to the treatment of the disease are drugs, labs, and visits that contribute to the total annual cost of US\$30,647.78 per patient. **CONCLUSIONS:** MDS patients with 5q deletion impose a high economic burden to the public healthcare system in Mexico, although the incidence is lower than other hematological malignancies

PSY42

PHARMACOECONOMIC CONSIDERATIONS ABOUT BREAKTHROUGH CANCER PAIN

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